API NUMBER: 043 23484

Chlorides Max: 8000 Average: 5000

Liner not required for Category: C Pit Location is AP/TE DEPOSIT Pit Location Formation:

Wellhead Protection Area?

Category of Pit: C

Within 1 mile of municipal water well? N

Is depth to top of ground water greater than 10ft below base of pit? Y

is located in a Hydrologically Sensitive Area.

TERRACE

Oil & Gas

Horizontal Hole

## **OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION** P.O. BOX 52000 **OKLAHOMA CITY, OK 73152-2000** (Rule 165:10-3-1)

10/20/2016 Approval Date: Expiration Date: 04/20/2017

PERMIT TO DRILL

	<u>. =</u>		<del></del>		
WELL LOCATION: Sec: 32 Twp: 17N Rge: 19W	County: DEWEY				
SPOT LOCATION: NE NW NW NE FEET FR	OM QUARTER: FROM NORT	H FROM EA	AST		
SECTION	LINES: 250	22	00		
Lease Name: CURRY TRUST	Well No: 1-32H		Well will be	e 250 feet from nearest uni	t or lease boundary.
Operator JMA ENERGY COMPANY LLC Name:	Tel	lephone: 40594	74322	OTC/OCC Number: 2	20475 0
JMA ENERGY COMPANY LLC  1021 NW GRAND BLVD  OKLAHOMA CITY	2,6020		DAVID CURRY P.O. BOX 1509		
OKLAHOMA CITY, OK 73118	3-6039		NORMAN	OK 73070	)
Formation(s) (Permit Valid for Listed Formation Name  1 CLEVELAND 2 3 4 5	Depth 9004	6 7 8 9 10	Name	Depth	
Spacing Orders: 643138	Location Exception Orders	655013		Increased Density Orders:	
		643650			
Pending CD Numbers:				Special Orders:	
Total Depth: 13689 Ground Elevation: 1799	Surface Casin	g: 1500	Dept	h to base of Treatable Water-Bear	ing FM: 330
Under Federal Jurisdiction: No	Fresh Water Supply	Well Drilled: N	lo	Surface Water used to	Drill: No
PIT 1 INFORMATION		Approv	ved Method for disposal of Dril	ling Fluids:	
Type of Pit System: CLOSED Closed System Means Steel Pits	3				
Type of Mud System: WATER BASED		D. On	e time land application (REC	QUIRES PERMIT)	PERMIT NO: 16-31690

H. SEE MEMO

## PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: OIL BASED
Chlorides Max: 300000 Average: 200000

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well? N
Wellhead Protection Area? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C
Pit Location is AP/TE DEPOSIT
Pit Location Formation: TERRACE

## **HORIZONTAL HOLE 1**

Sec 32 Twp 17N Rge 19W County DEWEY SW Spot Location of End Point: W2 SW SF Feet From: SOUTH 1/4 Section Line: 330 Feet From: WEST 1/4 Section Line: 1400

Depth of Deviation: 8662
Radius of Turn: 573
Direction: 190

Total Length: 4127

Measured Total Depth: 13689

True Vertical Depth: 9235

End Point Location from Lease,
Unit, or Property Line: 330

Notes:

Category Description

DEEP SURFACE CASING 10/17/2016 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS

OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR

SURFACE CASING

HYDRAULIC FRACTURING 10/17/2016 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF

HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK HTTP://FRACFOCUS.ORG/ WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS

COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE.

LOCATION EXCEPTION - 643650 10/17/2016 - G75 - (I.O.) 32-17N-19W

X643138 CLVD

COMPL. INT. NCT 330' FNL, NCT 330' FSL, NCT 660' FEL

JMA ENERGY CO., L.L.C.

7-31-2015

LOCATION EXCEPTION - 655013 10/17/2016 - G75 - EXTEND 643650 UNTIL 7-31-2017

MEMO 10/17/2016 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS (REQUIRED - CANADIAN RIVER);

PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

SPACING - 643138 10/17/2016 - G75 - (640)(HOR) 32-17N-19W

VAC 427743 CLVD EXT 633117 CVLD POE TO BHL NCT 660' FB

This permit does not address the right of entry or settlement of surface damages. The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1. Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA 6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS API 043-23484 DEWEY County, Oklahoma \_\_ Range \_\_\_\_19W\_\_I.M. 250'FNL - 2200'FEL 17N Section \_\_ \_ Township REFERENCE STAKE 250' WEST ELEV. 1798' > 250 CALCULATED CORNER X 1630600 Y 334900 1633237 1627958 1628855 334927 PROPOSED PAD 334925 (440) N/2-NE/4 OKNM 017742 LANDING POINT MD@9965.97 REFERENCE STAKE 250' SOUTH ELEV. 1798' OKNM 0100916 мD@9965.97 1161'FNL—2708'FEL 35°54'37.2"N LOT 1 PROPOSED LEASE ROAD 99°14'51.8"W LANDING POINT 35.910326368°N 99.247714880°W 1630512 (2390') 11 LOT 333740 CANADIAN RIVER LOT 3 SE/4-NE/4 (37 l (32)NAD-27 OK NORTH U.S. FEET 1633197 Y 332210 Scale: 1"= 1000' LOT 4 NE/4-SE/4 MEANDER 1000 1627930 O 331611 OKNM 098653 BOTTOM HOLE 330'FSL - 1400'FWL 35'53'59.5"N 99°15'05.9"W 35.899851980°N LOT 5 99.251625544°W 111 1629305 329943 MEANDER CORNER X 1632348 //BOTTOM HOLE 11 329573 T<u>17</u>N - <u>R19W</u> T16N - R19W Township Line-PARALLEL NORTH 1627900 MEANDER CORNER X 162934 Y 329612 X 1633156 Y 329562 X 1629217 1633156 329631 Y 329614 1629346 329612 NOTE: Distances shown in (parenthesis) are calculated based upon the Quarter Section being 2640 feet, those shown in [brackets] are based on GLO (General Land Office) distances and have NOT been measured on the ground. The information shown herein is for construction purposes ONLY. Operator: JMA ENERGY CO., LLC **ELEVATION:** Lease Name: CURRY TRUST Well No.: \_1-32H 1799' Gr. at Stake Location fell in level to sloping grass pasture. Topography & Vegetation\_ Reference 250' West - Elev. 1798' & 250' South - Elev. 1798' Good Drill Site? \_ Stakes Set ... From North off lease road. Best Accessibility to Location \_ Distance & Direction from Hwy Jct or Town From Camargo, Ok., go 0.75± mile East, then 1.0± mile South, then 0.25± mile East, then 4.0± mile Southeast, then 1.75± mile South, then 1.0± mile West, then 1.0± mile South through Section 29, then to the Northeast corner of Section 32, T17N - R19W. ALL SESSIONAL Date of Drawing: October 19, 2016 Revision X E Invoice # 258435 Date Staked: \_\_\_ March 22, 2016 **RKM** DATUM: NAD-27 LAT: 35°54'46.2"N LONG: 99'14'45.6"W **CERTIFICATE:** CENSED SURVE LAT: 35.912825936°N THOMAS L Thomas L. Howell \_an Oklahoma Licensed Land informatio with a GF oot Horiz./Ve HOWELL LONG: 99.245993820°W Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the STATE PLANE COORDINATES: (US Feet) information shown herein This gathered with ±1 for \*LAHOMA ZONE: OK NORTH 1631033 Oklahoma Lic. No. 1433 334644